LUDMIŁA WASZKIEWICZ, KATARZYNA POŁTYN-ZARADNA, KATARZYNA ZATOŃSKA, BOŻENA HOLKA, JAKUB EINHORN

Wiedza młodzieży gimnazjalnej na temat chorób przenoszonych drogą krwionośną

Streszczenie

Wstęp. W Polsce szacuje się, że liczba nosicieli HBs wynosi około 1,5 mln osób, a ślady infekcji - obecne przeciwciała anty HBc - wykrywa się blisko u 10% populacji, a liczba aktywnie replikujących i zarażających nosicieli przekracza 500 tys. osób. Szacuje się, że w Polsce jest prawie 800 tys. osób zarażonych wirusem HCV. W Polsce od 1985 roku do 31 marca 2008 roku stwierdzono zakażenie HIV u 11431 obywateli polskich oraz ogółem 2052 zachorowania na AIDS.

Cel. Celem niniejszej pracy było zbadanie poziomu wiedzy młodzieży gimnazjalnej w zakresie profilaktyki chorób szerzących się drogą krwionośną na przykładzie infekcji HBV, HCV i HIV.

Materiał i metoda. Anonimowe badania ankietowe przeprowadzono w roku szkolnym 2006/2007 wśród 100 losowo wybranych uczniów uczęszczających do III klasy gimnazjum. Dane przeanalizowano z uwzględnieniem płci.

Wyniki. Zdecydowana większość badanych (94%) identyfikuje HBV, HCV i HIV jako zakażenia szerzące się drogą krwionośną. Lepszą znajomością dróg szerzenia się zakażeń wykazały się dziewczęta. Zaledwie 16 uczniów wskazało pełną odpowiedź w przypadku działań profilaktycznych HBV, 10 osób w przypadku HCV oraz 30 uczniów w odniesieniu do HIV/AIDS. Wyższy poziom wiedzy w zakresie profilaktyki prezentują dziewczęta. Niespełna jedna trzecia badanych uczniów ocenia poziom swojej wiedzy w zakresie profilaktyki HBV, HCV i HIV jako niewystarczający przy czym ponad połowa uczniów (59%) uważa, że znajomość zasad profilaktyki uchroni ich przed zakażeniem.

Wnioski. Wskazane byłoby zintensyfikowanie działań z zakresu edukacji zdrowotnej, ze szczególnym uwzględnieniem zagadnień dotyczących zakażeń przenoszonych drogą krwionośną w ramach edukacji szkolnej, oraz objęcie działaniami z zakresu profilaktyki zakażeń przenoszonych drogą krwionośną również rodziców uczniów.

Słowa kluczowe: profilaktyka HBV, profilaktyka zakażeń, młodzież gimnazjalna, AIDS

Knowledge about the prevalence of blood-transmitted diseases among lower secondary school students

Abstract

Introduction. In Poland estimate that number of HBS vectors is about 1.5 million persons, and a sign of infection – anti HBC antibody – is detected in approximately 10% of the population, and a number of active replicating and infected vectors is over 500 thousand peoples. We estimate that in Poland almost 800 thousand peoples are infected with hepatitis C virus (HCV). In Poland, from 1985 to 31 March 2008, infection with HIV was detected in 1,1431 Polish citizens, 2,052 of which developed the acquired immunodeficiency syndrome (AIDS).

Aim. The aim of the study was to examine the of knowledge among young people from the lower secondary school about prevention of diseases connected with blond, such as infection with hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

Material and method. An anonymous questionnaire study was carried out in 2006/2007 school year among 100 3rd-grade lower secondary school students. The result of the research was analyzed with respect to sex.

Results. Almost all of the students (94%) know that HBV, HCV and HIV are diseases connected with blood. Girls presented a better understanding of the ways that infections can spread. Only 16 students indicated the optimum answer concerning HBV prevention, 10 students optimally answered the questions concerning HCV prevention, and 30 – those related to HIV/AIDS. A higher level of knowledge of prevention against HBV, HCV, and HIV was presented by girls. Less than a third of the students surveyed estimated their knowledge level of prevention as insufficient, while more than half of the students (59%) believed that the sufficient knowledge on prevention against HBV, HCV and HIV will protect them from infecting.

Conclusion. It would be advisable to intensify activities in the field of health education, with particular emphasis on blood-transmitted infections, and to aim the education on blood transmitted infections at the students' parents.

Key wards: HBV prophylactics, infection prophylactics, lower secondary school students, AIDS

Department of Social Medicine Medical Academy in Wrocław

INTRODUCTION

Infectious diseases belong to the group of diseases that occur according to certain activities. Knowledge about the dangers related to pathogenic microorganisms, the ways in which the diseases spread, and the prophylactic measures, help to avoid or significantly decrease the risk of contracting an illness.

The problem of HBV and HCV infections, similarly to HIV, has a global character. There are about 350 million HBV carriers, which accounts for about 5% of the world population (in the highly developed countries: 0.1-0.2% of the population, in the third world countries: about 10-15%) [1]. Less than 3% of people in the world have anti-HCV antibodies, which means a current or past infection [2]. HBV and HCV viruses are main reasons of the primary liver cancer occurrence. About 7-30% of the chronically infected with HBV, and at least 20% of the chronically infected with HCV, develop primary liver cancer within 20-30 years [3,4].

In Poland, the estimated number of HBS antigen carriers is about 1.5 million people, traces of infection – present anti-HBC antibodies – are found in almost 10% of the population, and the number of actively replicating and infecting carriers exceeds 500 thousand people [1]. The estimated number of HCV-infected people in Poland is about 800 thousand people [2]. The occurrence of hepatitis type B and C in 100,000 people in Poland is one of the highest in Europe, and in 2006 this indicator was 12.5 [5]. It is believed that in Poland 50-60% of the adult population (in the case of HCV, up to 70%), and in the case of children older than 4, 80% of infections is connected with visits to health care units and medical procedures they undergo [3,6]. Currently we are witnessing a decrease in HBV infections in Poland. Due to the implementation of the prevention program, the number of infections with HBV decreased from 16,763 in 1985 to 1,727 in 2005.

According to the estimates, in 2007 there were app. 33.2 mln (30.6-36.1 mln) people infected with HIV, while in 2001 it was only 29 mln (26.9-32.4mln) [7]. In Poland, from 1985 to 31 March 2008 there were 11,431 confirmed HIV infections, 5,444 of which were due to the use of drugs. Generally, there were 2,052 infections with AIDS, 913 patients died [8].

AIM

The aim of this work is to test the level of knowledge in lower secondary school students on diseases spreading through blood, such as HBV, HCV and HIV infections.

MATERIAL AND METHODS

Anonymous questionnaires were completed in the school year 2006/2007 by 100 randomly chosen students of 3rd grade of the lower secondary school (50 students from the city and 50 students from the rural areas). Girls were 47% of the respondents. The research tool was the author-devised questionnaire concerning knowledge of spreading HBV, HCV and HIV, awareness of prophylactic methods and symptoms of those diseases, as well as general knowledge about them.

The statistical significance was estimated with chi-square Pearson's test, the assumed level of significance was $p \leq 0.05$. The direction and strength of the dependence was calculated with Q-Yule correlation coefficient. The data were analyzed according to sex.

RESULTS

A large majority of the respondents (94% - all the girls, and 47 out of 53 boys) identified HBV, HCV and HIV as infections spreading through blood. Yet their knowledge about the possible ways of getting infected with HBV, HCV and HIV viruses and about the prophylactic activities is insufficient.

Only three quarters of the students (74%) are aware that they can get infected with HBV, HCV and HIV at a hairdresser, a beauty salon or during tattooing. The girls showed a much greater awareness (chi-square 10.877; p=0.01; |Q|=0.69).

Unfortunately, 47% of the students believe that using the same toilet as HBV, HCV and HIV carriers can cause infection. A higher level of knowledge in this area was presented by the boys (chi-square 3.885; p=0.05; |Q|=0.38). The above result suggests the necessity of educational activities aiming to change the false beliefs that in future can lead to hostile attitudes that would isolate and stigmatize of HBV, HCV and HIV carriers. Nearly 80% of respondents identified the prevention measures of HBV infection. Unfortunately, only 16% of the students are aware that prevention include vaccinations and the use of disposable medical equipment, 51% believe that there are only vaccinations, and 10% perceive disposable medical equipment as the only prevention method.

Girls present higher level of knowledge of the principles of preventing infection with HBV (chi-square 8.870, p = 0.01, |Q|=0.73). Only 63% of the respondents indicate measures that reduce the risk of HCV infection. Only 10% of the lower secondary school students know that neither the use of disposable medical equipment nor the use of condoms prevent from HCV. Only 16 students (10 boys) indicate the use of condoms as a method of preventing HCV infection, the remaining respondents (37 people) indicate the use of disposable medical equipment.

The lower secondary school students present the highest level of knowledge about preventive measures against HIV, although only 30% of them included avoidance of accidental sexual contact, condom use and the use of disposable medical equipment as a prevention measure. The rest indicated the following prevention actions: avoidance of accidental sexual contact (37%), condom use (28%) and the use of disposable medical equipment (5%). The girls showed a higher level of knowledge (chi-square 6.654, p = 0.01, |Q|=0.52).

Particular attention should be paid to the fact that only just over half (57%) of the lower secondary school

students are aware that condom use is one of the preventive measures against HIV infection. This awareness is even lower in relation to HCV infection, in this case, only 26% of the respondents believed that the use of condoms reduces the risk of infection. Given the results of the HBSC study in 2002 (Health Behaviour in School-aged Children: A WHO Cross-National Study) indicate that the average age of sexual initiation in Poland is 14.1 years for boys, and 14.7 for girls [9], it seems necessary to intensify educational activities aimed at raising the level of knowledge among lower secondary school students.

The knowledge of symptoms of infection with HBV, HCV and HIV is very low. Only 11% of the respondents were able to name at least one symptom of hepatitis B and hepatitis C, and only less than a third (29%) reported at least one clinical symptom of AIDS.

Much greater knowledge concerning the clinical incidence of viral hepatitis and AIDS is presented by the girls (chi-square 41; 279, $p = 0.01$, $|Q|=0.91$). Other studies conducted in groups of students and adults [10,11], also indicate a lack of knowledge on the clinical aspect.

Just over a half of the students (56%) declare that they know where to find expert help in cases of suspected HIV infection, while less than a half of the respondents have such knowledge in relation to HBV infection (46%), and HCV (43%).

More than a half of the respondents (59%) is aware that knowing and respecting the principle of prevention can protect against virus infection, like HBV, HCV and HIV. At the same time, the lower secondary school students critically assess the level of their knowledge. Only 38% considers it as satisfactory, 35% said that their knowledge is insufficient, and 27% of students cannot estimate the level of their knowledge. Other studies confirm a lack of knowledge in different age groups [10,12,13].

The most commonly cited source of knowledge about the prevention of infections spreading through the blood vessels is school (47%), followed by the media (35%), and parents (28%). It is worth noting that the girls more often presented the knowledge acquired from parents (chi-square 9.316, $p = 0.01$, $|Q|=0.61$). The respondents are less likely to get information from their peers (13%). The importance of school health education is also stressed by other respondents indicating it as one of the main sources of knowledge [12].

CONCLUSION

1. It would be advisable to intensify activities in the field of health education, with particular emphasis on the blood transmitted infections.
2. Education on blood-transmitted infections should be aimed at the students' parents.

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Informacja o Autorach

Prof. dr hab. LUDMIŁA WASZKIEWICZ – kierownik, dr n. med. KATARZYNA POŁTYN-ZARADNA – asystent, dr n. med. KATARZYNA ZATOŃSKA – adiunkt; HOLKA BOŻENA – student, Dolnośląska Szkoła Wyższa; mgr JAKUB EINHORN – doktorant, Katedra i Zakład Medycyny Społecznej, Akademia Medyczna we Wrocławiu.

Adres do korespondencji

Katedra i Zakład Medycyny Społecznej
Akademia Medyczna we Wrocławiu
50-345 Wrocław, ul. Bujwida 44, tel./fax 071/328-21-45,
e-mail: studium@msizp.am.wroc.pl